Harris A.
10/076047

FILE 'HCAPLUS' ENTERED AT 10:41:28 ON 25 FEB 2004
L1 0 S BF14(S)BREAST OR BREAST CANCER(1W)FEATURE(2W)14 -Key terms
L2 0 S (BF(2W)14)(S)BREAST
L3 3 S FICOLIN(1W)3

L3 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 25 Jul 2003
ACCESSION NUMBER: 2003:571232 HCAPLUS
DOCUMENT NUMBER: 139:128012
TITLE: Over-expressed gene markers useful in compositions, kits, and methods for identification, assessment, prevention, and therapy of rheumatoid arthritis
INVENTOR(S): Guild, Braydon C.; Liao, Hua; Jones, Michael D.; Zolg, Johannes W.; Wu, Jiang
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 172 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003060465	A2	20030724	WO 2002-US40271	20021217
WO 2003060465	A3	20031211		

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003224386	A1	20031204	US 2002-320352	20021216

PRIORITY APPLN. INFO.: US 2001-341942P P 20011219
AB The invention relates to composition, kits, and methods for detecting, characterizing, preventing, and treating human rheumatoid arthritis (RA). A variety of newly-identified markers are provided, wherein changes in the levels of expression of one or more of the markers is correlated with RA. The markers were initially identified in the synovial fluid of human patients who have been diagnosed with either erosive or non-erosive RA. Four hundred ninety markers were identified by mass spectrometry after synovial fluid samples were subjected to digestion of hyaluronic acid followed by a series of protein depletion and fractionation steps to enrich subsets of proteins from the original synovial fluid samples. Some of the identified markers were than validated in serum of patients who have been diagnosed with either erosive or non-erosive RA.

L3 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 07 Feb 2003

Searcher : Shears 571-272-2528

ACCESSION NUMBER: 2003:97550 HCAPLUS
DOCUMENT NUMBER: 138:164674
TITLE: Molecular markers for hepatocellular carcinoma and their use in diagnosis and therapy
INVENTOR(S): Debuschewitz, Sabine; Jobst, Juergen; Kaiser, Stephan
PATENT ASSIGNEE(S): Germany
SOURCE: PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003010336	A2	20030206	WO 2002-EP8305	20020725
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10136273	A1	20030213	DE 2001-10136273	20010725
WO 2004011945	A2	20040205	WO 2003-EP8243	20030725
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: DE 2001-10136273 A 20010725
WO 2002-EP8305 A 20020725

AB The invention relates to mol. markers occurring for hepatocellular carcinoma. The invention more particularly comprises gene sequences or peptides coded thereby which can be regulated upwards or downwards for hepatic cell carcinoma (HCC) in relation to healthy, normal liver cells in the expression thereof. The invention also relates to the use of said sequences in the diagnosis and/or therapy of HCC and for screening purposes in order to identify novel active ingredients for HCC. The invention also relates to an HCC specific cluster as a unique diagnostic agent for HCC.

L3 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 12 Apr 2002
ACCESSION NUMBER: 2002:276203 HCAPLUS

DOCUMENT NUMBER: 136:290017
TITLE: Gene expression profiles in hepatocellular carcinoma and metastatic liver cancer
INVENTOR(S): Horne, Darci; Alvares, Christopher; Peres da Silva, Supriya; Vockley, Joseph G.
PATENT ASSIGNEE(S): Gene Logic, Inc., USA
SOURCE: PCT Int. Appl., 298 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002029103	A2	20020411	WO 2001-US30589	20011002
WO 2002029103	A3	20030904		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002142981	A1	20021003	US 2001-880107	20010614
AU 2002011313	A5	20020415	AU 2002-11313	20011002

PRIORITY APPLN. INFO.:
US 2000-237054P P 20001002
US 2000-211379P P 20000614
WO 2001-US30589 W 20011002

AB The present invention identifies the global changes in gene expression associated with liver cancer by examining gene expression in tissue from normal liver, metastatic malignant liver and hepatocellular carcinoma (HCC). Gene signatures were obtained by hybridizing cDNA from liver samples mRNA onto the Affymetrix HuGeneFl array and the Human Hu35k set of arrays. There are 8479 genes and ESTs in the pos. Gene Signature for the HCC tumors, and a total of 23,233 genes and ESTs are included in the neg. Gene Signature of the HCC samples (e.g., all the genes that have been completely turned off during tumorigenesis, as well as those genes that are not usually expressed in liver tissue). A differential comparison of the genes and ESTs expressed in the normals and the two different types of liver tumors identifies a subset of the genes included in the pos. Gene Signatures that are uniquely expressed in each sample set. A number of the tumor-expressing genes are closely examined to determine if their expression patterns correlate with previous reports published in the literature, and to define a logical relationship between the gene and hepatocarcinogenesis. The present invention also identifies expression profiles which serve as useful diagnostic markers as well as markers that can be used to monitor disease states, disease progression, drug toxicity, drug efficacy and drug metabolism

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, CONFSCI, SCISEARCH, CANCERLIT' ENTERED AT 10:46:51 ON 25 FEB 2004)

L4 0 S L1
L5 1 S L2
L6 2 S L3
L7 3 S L5 OR L6
L8 3 DUP REM L7 (0 DUPLICATES REMOVED)

L8 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 2003:457205 BIOSIS
DOCUMENT NUMBER: PREV200300457205
TITLE: Production and characterisation of recombinant Ficolin-2.
AUTHOR(S): Hummelshoj, T. [Reprint Author]; Seyfarth, J. [Reprint Author]; Madsen, H. O. [Reprint Author]; Matsushita, M.; Garred, P. [Reprint Author]
CORPORATE SOURCE: Department of Clinical Immunology, Rigshospitalet, Copenhagen, Denmark
SOURCE: Molecular Immunology, (September 2003) Vol. 40, No. 2-4, pp. 200-201. print.
Meeting Info.: 9th European Complement Workshop. Trieste, Italy. September 06-09, 2003.
ISSN: 0161-5890 (ISSN print).
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 1 Oct 2003
Last Updated on STN: 1 Oct 2003

L8 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 2003:340135 BIOSIS
DOCUMENT NUMBER: PREV200300340135
TITLE: Molecular cloning and characterization of novel ficolins from Xenopus laevis.
AUTHOR(S): Kakinuma, Yuji; Endo, Yuichi [Reprint Author]; Takahashi, Minoru; Nakata, Munehiro; Matsushita, Misao; Takenoshita, Seiichi; Fujita, Teizo
CORPORATE SOURCE: Department of Biochemistry, Fukushima Medical University School of Medicine, 1-Hikarigaoka, 960-1295, Fukushima, Japan
yendo@fmu.ac.jp
SOURCE: Immunogenetics, (April 2003) Vol. 55, No. 1, pp. 29-37. print.
CODEN: IMNGBK. ISSN: 0093-7711.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Jul 2003
Last Updated on STN: 23 Jul 2003

AB Ficolins are proteins characterized by the presence of collagen- and fibrinogen-like domains. Two of three human ficolins, L-ficolin and H-ficolin, are serum lectins and are thought to play crucial roles in host defense through opsonization and complement activation. To elucidate the evolution of ficolins and the primordial complement lectin pathway, we cloned four ficolin cDNAs from Xenopus laevis,

termed Xenopus ficolin (XeFCN) 1, 2, 3 and 4. The deduced amino acid sequences of the four ficolins revealed the conserved collagen- and fibrinogen-like domains. The full sequences of the four ficolins showed a 42-56% identity to human ficolins, and 60-83% between one another. Northern blots showed that XeFCN1 was expressed mainly in liver, spleen and heart, and XeFCN2 and XeFCN4 mainly in peripheral blood leukocytes, lung and spleen. We isolated ficolin proteins from Xenopus serum by affinity chromatography on N-acetylglucosamine-agarose, followed by ion-exchange chromatography. The final eluate showed polymeric bands composed of two components of 37 and 40 kDa. The N-terminal amino acid sequences and treatment with endoglycosidase F showed that the two bands are the same XeFCN1 protein with different masses of N-linked sugar. The polymeric form of the two types of XeFCN1 specifically recognized GlcNAc and GalNAc residues. These results suggest that like human L-ficolin, XeFCN1 functions in the circulation through its lectin activity.

L8 ANSWER 3 OF 3 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 87204252 EMBASE
DOCUMENT NUMBER: 1987204252
TITLE: The nutritional role of breast-milk IgA and lactoferrin.
AUTHOR: Prentice A.; Ewing G.; Roberts S.B.; et al.
CORPORATE SOURCE: Medical Research Council, Dunn Nutrition Laboratory, Cambridge, CB4 1XJ, United Kingdom
SOURCE: Acta Paediatrica Scandinavica, (1987) 76/4 (592-598). CODEN: APSVAM
COUNTRY: Sweden
DOCUMENT TYPE: Journal
FILE SEGMENT: 007 Pediatrics and Pediatric Surgery
026 Immunology, Serology and Transplantation
LANGUAGE: English

AB The nutritional enigma concerning the extent to which **breast**-milk immune proteins are digested has been investigated by measuring the intakes and faecal outputs of IgA and lactoferrin over 7 days in 10 exclusively **breast**-fed (BF) and 9 formula-fed (FF) fullterm infants at 6 and 12 weeks post-partum. BF outputs (mg/day) greatly exceeded FF values ($p<0.001$): at 6 weeks secretory-IgA BF=160±28, FF=14±2, lactoferrin **BF**=**14**.+-.2, FF=0.9±0.1; at 12 weeks secretory-IgA BF=94±17, FF=25±5, lactoferrin BF=7±1, FF=1±0.3. Secretory-IgA represented 42% and 27% of BF faecal protein at 6 and 12 weeks compared with 6% for FF infants at both ages. BF secretory-IgA outputs were highly correlated with intakes ($r=0.83$, $p<0.001$). IgA and lactoferrin outputs and the presence of faecal secretory-IgA fragments in BF and FF infants were influenced by defaecation rate, suggesting that partial degradation occurred in the large intestine. By 6 weeks post-partum only 1% lactoferrin and 17% secretory-IgA intakes appeared in the faeces and 95% **breast**-milk protein could be regarded as nutritionally available. The elevated BF outputs of IgA and lactoferrin relative to endogenous excretion suggest, however, that **breast**-milk may still make a considerable contribution to intestinal defence mechanisms after the neonatal period despite the small proportion of

daily intake which escapes digestion. The protective action of IgA and lactoferrin may also depend on their site of degradation and the nature of fragments.

FILE 'HCAPLUS' ENTERED AT 10:55:52 ON 25 FEB 2004

L9 2 SEA FILE=HCAPLUS ABB=ON PLU=ON BF##(S)((BC OR BREAST CANCER)(W)ASSOC?) OR (BC OR BREAST CANCER)(W)ASSOC? FEATURE

L10 2 L9 NOT L3

L10 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 25 Feb 2001
ACCESSION NUMBER: 2001:137483 HCAPLUS
DOCUMENT NUMBER: 134:203384
TITLE: BPI proteins, genes and their use for diagnosis and treatment of breast cancer
INVENTOR(S): Herath, Herath Mudiyanselage Athula Chandrasiri
PATENT ASSIGNEE(S): Oxford Glycosciences (UK) Limited, UK
SOURCE: PCT Int. Appl., 146 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001013117	A2	20010222	WO 2000-GB3143	20000814
WO 2001013117	A3	20020117		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1208381	A2	20020529	EP 2000-953323	20000814
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003507027	T2	20030225	JP 2001-517168	20000814
US 2003152935	A1	20030814	US 2002-76047	20020213
PRIORITY APPLN. INFO.:			GB 1999-19258 A	19990813
			GB 2000-7754 A	20000330
			WO 2000-GB3143 W	20000814

AB The present invention provides methods and compns. for screening, diagnosis and prognosis of breast cancer, for monitoring the effectiveness of breast cancer treatment, and for drug development. **Breast Cancer-Associated Features** (**BFs**), detectable by two-dimensional electrophoresis of serum are described. The invention further provides Breast Cancer-Associated Protein Isoforms (BPIs) detectable in cerebrospinal fluid, serum or plasma, prepns. comprising isolated BPIs, antibodies

immunospecific for BPIs, and kits comprising the aforesaid.

L10 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 22 Sep 2000
ACCESSION NUMBER: 2000:666972 HCAPLUS
DOCUMENT NUMBER: 133:219795
TITLE: Proteins for diagnosis and treatment of breast cancer
INVENTOR(S): Amess, Bob; Townsend, Robert Reid; Parekh, Rajesh Bhikhu; Waterfield, Michael Derek; O'Hare, Michael John
PATENT ASSIGNEE(S): Oxford Glycosciences (UK) Ltd., UK
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000055628	A1	20000921	WO 2000-GB908	20000313
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1159618	A1	20011205	EP 2000-909494	20000313
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: GB 1999-5817 A 19990312
WO 2000-GB908 W 20000313

AB The present invention provides methods and compns. for screening, diagnosis and prognosis of breast cancer, for monitoring the effectiveness of breast cancer treatment, and for drug development. **Breast Cancer-Associated Features** (**BFs**), detectable by two-dimensional electrophoresis of breast tissue, are described. The invention further provides Breast Cancer-Associated Protein Isoforms (BPIs) detectable in breast tissue, prepns. comprising isolated BPIs, antibodies immunospecific for BPIs, and kits comprising the aforesaid. Luminal and myoepithelial cells were purified by immunomagnetic methods from 10 sets of matched normal and cancer breast cell tissue. Two-dimensional electrophoresis was used to sep. the proteins. High resolution detection of protein features using fluorescent dyes, coupled to advanced software to identify differentially expressed features, high through-put mass spectrometry and bioinformatics was also applied. This has allowed the identification of large sets of proteins which are differentially expressed between the luminal and myoepithelial human breast cell proteomes.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

Searcher : Shears 571-272-2528

IN THE RE FORMAT

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, CONFSCI, SCISEARCH, CANCERLIT' ENTERED AT 10:57:42 ON 25 FEB 2004)

L11 4 S L9
L12 4 DUP REM L11 (0 DUPLICATES REMOVED)

L12 ANSWER 1 OF 4 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2003-175048 [17] WPIDS
DOC. NO. NON-CPI: N2003-137905
DOC. NO. CPI: C2003-045678
TITLE: Screening, diagnosing or determining the stage or severity of breast cancer, comprises analyzing and quantitatively detecting **Breast Cancer-Associated Features** or Breast Cancer-Associated Protein Isoforms in a biological sample.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): HERATH, H M A C
PATENT ASSIGNEE(S): (OXFO-N) OXFORD GLYCOSCIENCES UK LTD
COUNTRY COUNT: 101
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002088750	A2	20021107	(200317)*	EN	88
EP 1384079	A2	20040128	(200409)	EN	

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002088750	A2	WO 2002-GB2022	20020502
EP 1384079	A2	EP 2002-720302	20020502
		WO 2002-GB2022	20020502

FILING DETAILS:

PATENT NO	KIND		PATENT NO
EP 1384079	A2	Based on	WO 2002088750

PRIORITY APPLN. INFO: GB 2001-28062 20011122; GB 2001-10790 20010502; GB 2001-18385 20010727; GB 2001-19791 20010814; GB 2001-20045 20010816
AN 2003-175048 [17] WPIDS
AB WO 200288750 A UPAB: 20030312

Searcher : Shears 571-272-2528

NOVELTY - Screening, diagnosing or determining the stage or severity of breast cancer, identifying a subject at risk of developing breast cancer, or monitoring the effect of therapy administered to a subject with breast cancer, by generatating a two-dimensional array of features comprising **Breast Cancer-Associated Features (BFs)**, or quantitatively detecting **Breast Cancer-Associated** Protein Isoforms (BPIs).

DETAILED DESCRIPTION - Screening, diagnosing or determining the stage or severity of breast cancer, identifying a subject at risk of developing breast cancer, or monitoring the effect of therapy administered to a subject with breast cancer, comprises:

(a) analyzing a test biological sample from the subject by two-dimensional electrophoresis to generate a two-dimensional array of features, where the array comprises one or more of the BFs consisting of BF-101, BF-102, BF-103, BF-104, BF-105, BF-106, BF-107, BF-108, BF-109, BF-110, BF-111, BF-112, BF-113, BF-114, BF-115, BF-116, BF-117, BF-118, BF-119, BF-120, BF-121, BF-122, BF-123, BF-124, BF-125, BF-126, BF-127, BF-128, BF-129, BF-130, BF-131, BF-132, BF-133, BF-134, BF-135, BF-136, BF-137, BF-138, BF-139, BF-140, BF-141, BF-142, BF-143, BF-144, BF-145, BF-146, BF-147, BF-148, BF-149, BF-150, BF-151, BF-152, BF-153, BF-155, BF-156, BF-157, BF-158, BF-159, BF-160, BF-161, BF-162, BF-163, BF-164, BF-165, BF-166, BF-509, BF-510, BF-511, BF-512, BF-513, BF-514, BF-515, BF-516, BF-517, BF-518, BF-519, or BF-520; and

(b) comparing the abundance of one or more BFs in the test sample with the abundance of one or more BFs in a biological sample from one or more subjects free from breast cancer, or with a previously determined reference range for that feature in subjects free from breast cancer, or with the abundance of an Expression Reference Feature (ERF) in the test sample.

Alternatively, the method comprises quantitatively detecting, in a test biological sample from the subject, one or more of the BPIs consisting of BPI-186, BPI-101, BPI-187, BPI-102, BPI-103, BPI-104, BPI-188, BPI-111, BPI-113, BPI-114, BPI-115, BPI-117, BPI-118, BPI-191, BPI-119, BPI-120, BPI-121, BPI-123, BPI-124, BPI-125, BPI-126, BPI-127, BPI-189, BPI-192, BPI-128, BPI-129, BPI-130, BPI-131, BPI-133, BPI-135, BPI-138, BPI-139, BPI-143, BPI-144, BPI-145, BPI-146, BPI-147, BPI-148, BPI-149, BPI-150, BPI-152, BPI-153, BPI-154, BPI-155, BPI-156, BPI-158, BPI-159, BPI-160, BPI-161, BPI-162, BPI-163, BPI-164, BPI-165, BPI-167, BPI-170, BPI-172, BPI-173, BPI-174, BPI-175, BPI-176, BPI-177, BPI-178, BPI-179, BPI-180, BPI-181, BPI-182, BPI-190, BPI-184, BPI-514, BPI-516, BPI-517, BPI-521, BPI-523, BPI-545, BPI-527, BPI-529, BPI-531, BPI-546, BPI-532, BPI-533, BPI-534, BPI-535, or BPI-536. INDEPENDENT CLAIMS are also included for the following:

(1) an antibody capable of immunospecifically binding to one of the BPIs;

(2) a kit comprising one or more antibodies of (1) and/or one or more of the BPIs, other reagents and instructions for use;

(3) pharmaceutical compositions comprising:

(a) a BPI, or a nucleic acid encoding a BPI, and a carrier; or

(b) the antibody of (1), or a fragment or derivative of the antibody, and a carrier;

(4) screening for agents that interact with one or more BPIs, fragments of BPIs (BPI fragment), polypeptides related to BPIs

Searcher : Shears 571-272-2528

(BPI-related polypeptide), or BPI-fusion proteins;

(5) screening for or identifying agents that modulate the expression or activity of one or more BPIs, a BPI fragment, a BPI-related polypeptide, or BPI-fusion proteins;

(6) modulating the activity of one or more of the BPIs;

(7) treating or preventing breast cancer; and

(8) identifying targets for therapeutic modulation of breast cancer, where the activity of one or more of the BPIs is utilized as a measure to determine whether a candidate target is effective for modulation of breast cancer.

ACTIVITY - Cytostatic. No biological data is given.

MECHANISM OF ACTION - Antisense gene therapy.

USE - Methods and kits comprising antibodies or the BPIs are useful for screening, diagnosing or determining the stage or severity of breast cancer, identifying a subject at risk of developing breast cancer, or monitoring the effect of therapy administered to a subject with breast cancer (all claimed). The antibodies, BPIs, nucleic acid encoding the BPIs, or an agent that modulates the activity of one or more BPIs are useful for treating or preventing breast cancer.

Dwg.0/3

L12 ANSWER 2 OF 4 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 2003129051 EMBASE

TITLE: Characterisation and developmental expression of mouse Plu-1, a homologue of a human nuclear protein (PLU-1) which is specifically up-regulated in breast cancer.

AUTHOR: Madsen B.; Spencer-Dene B.; Poulsom R.; Hall D.; Lu P.J.; Scott K.; Shaw A.T.; Burchell J.M.; Freemont P.; Taylor-Papadimitriou J.

CORPORATE SOURCE: J. Taylor-Papadimitriou, Breast Cancer Biology Group, Cancer Research UK, Guy's Hospital, St Thomas Street, London SE1 9RT, United Kingdom. joyce.taylor-papadimitriou@cancer.org.uk

SOURCE: Gene Expression Patterns, (2002) 2/3-4 (275-282).
Refs: 29
ISSN: 1567-133X CODEN: GEPEAD

PUBLISHER IDENT.: S 1567-133X(02)00051-0

COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 016 Cancer
021 Developmental Biology and Teratology
022 Human Genetics
029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

AB PLU-1 is a novel **breast cancer associated** nuclear protein containing highly conserved domains including the PLU domain, putative DNA/chromatin binding motifs, and PHD/LAP domains. Here we report the cloning of the mouse homologue (Plu-1), and document its expression in adult tissues, mammary tumours and the embryo. The overall homology with human PLU-1 is 94% at the protein level, with almost 100% identity in the conserved domains, suggesting functional conservation. As with human

PLU-1 the expression of Plu-1 in adult tissues is restricted, with high expression being seen only in testis, while expression in mammary tumours from c-neu transgenic mice is high. Plu-1 is also differentially expressed in the adult mammary gland. In the developing embryo Plu-1 is expressed in a temporally restricted fashion with tissue specific expression being limited to parts of the developing brain, whisker follicle, mammary bud, thymus, limbs, intervertebral disc, olfactory epithelium, teeth, eye, and stomach. The temporal and spatial expression patterns of the transcription factors **Bf**-1 and Pax9, recently found to bind to PLU-1 through the PLU domain overlap with Plu-1 expression during development. Thus Plu-1 appears to play an important role in mouse embryonic development which may involve interaction with Pax9 and **Bf**-1.

L12 ANSWER 3 OF 4 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-211252 [21] WPIDS
DOC. NO. NON-CPI: N2001-150902
DOC. NO. CPI: C2001-062838
TITLE: Screening, diagnosis or prognosis of breast cancer, by analyzing a sample of serum or plasma by two dimensional electrophoresis to detect the presence or level of a **breast cancer-associated feature.**
DERWENT CLASS: B04 D16 S03
INVENTOR(S): HERATH, H M A C; CHANDRASIRI HERATH, H M A
PATENT ASSIGNEE(S): (OXFO-N) OXFORD GLYCOSCIENCES UK LTD; (HERA-I) CHANDRASIRI HERATH H M A
COUNTRY COUNT: 95
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001013117	A2	20010222	(200121)*	EN	146
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2000065837	A	20010313	(200134)		
EP 1208381	A2	20020529	(200243)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
JP 2003507027	W	20030225	(200317)		194
US 2003152935	A1	20030814	(200355)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001013117	A2	WO 2000-GB3143	20000814
AU 2000065837	A	AU 2000-65837	20000814
EP 1208381	A2	EP 2000-953323	20000814

Searcher : Shears 571-272-2528

	WO 2000-GB3143	20000814
JP 2003507027 W	WO 2000-GB3143	20000814
	JP 2001-517168	20000814
US 2003152935 A1 Cont of	WO 2000-GB3143	20000814
	US 2002-76047	20020213

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000065837	A	Based on	WO 2001013117
EP 1208381	A2	Based on	WO 2001013117
JP 2003507027	W	Based on	WO 2001013117

PRIORITY APPLN. INFO: GB 2000-7754 20000330; GB 1999-19258 19990813

AN 2001-211252 [21] WPIDS

AB WO 200113117 A UPAB: 20010418

NOVELTY - Screening, diagnosis or prognosis of breast cancer (BC), determining the stage or severity of BC, monitoring the effect of therapy administered to a subject having BC, comprises analyzing a sample of body fluid by two dimensional electrophoresis to generate a two-dimensional array of features, comprising a chosen feature whose abundance correlates with BC or predicts the onset or course of BC.

DETAILED DESCRIPTION - The above method (I) involves:

(a) analyzing a sample of body fluid from the subject by two-dimensional electrophoresis to generate a two-dimensional array of features, comprising a chosen feature whose relative abundance correlates with BC or predicts the onset of BC; and

(b) comparing the abundance of each chosen feature in the sample with the abundance of that chosen feature in the body fluid from one or more persons free from BC, or with a previously determined reference range for that feature in subjects free from BC, or with the abundance of an Expression Reference Feature (ERF) in the test sample

INDEPENDENT CLAIMS are also included for the following:

(1) screening, diagnosis or prognosis of breast cancer (BC), determining the stage or severity of BC, monitoring the effect of therapy administered to a subject having BC, by quantitatively detecting in a sample of serum or plasma at least one breast cancer-associated protein isoforms (BPIs) selected from BPI-1, 5, 6, 9, 10-14, 19-21, 23-25, 27-29, 31-34, 37, 40, 40-56;

(2) a preparation (II) comprising BPIs as above;

(3) a preparation comprising an isolated human protein (having specific isoelectric point and molecular weight) having an amino acid sequence selected from the partial amino acid sequences of BPI-41 to BPI-56 as given in the specification;

(4) an antibody (III) capable of immunospecific binding to one of BPIs selected from BPI-1, 5, 6, 9, 10-14, 19-21, 23-25, 27-29, 31-34, 37, 40, 40-56;

(5) a kit comprising (II) or (III);

(6) a pharmaceutical composition comprising (III), its fragment or derivative containing the binding domain of (III);

(7) treating or preventing BC by administering a nucleic acid encoding or inhibiting the function of one of BPIs selected from

BPI-1, 5, 6, 9, 10-14, 19-21, 23-25, 27-29, 31-34, 37, 40, 40-56;

(8) use of a nucleic acid encoding or inhibiting the function of one of BPIs in the manufacture of a medicament for use in the prevention or treatment of BC;

(9) screening (IV) for or identifying agents that interact with a BPI, its fragment or related polypeptide, by contacting BPI, its biologically active portion or related polypeptide with a candidate agent and determining whether or not the candidate agent interacts with the BPI, its fragment or related polypeptide by quantitatively detecting binding between the agent and polypeptide;

(10) screening (V) for agents that modulate the expression or activity of a BPI or its related polypeptide, by:

(a) contacting a population of cells expressing BPI or its related polypeptide with a candidate agent, contacting another population of cells expressing the BPI or its related polypeptide with a control agent and comparing the level of BPI or its related polypeptide or mRNA encoding them in the two population of cells, or comparing the level of induction of a cellular second messenger in the two population of cells; or

(b) administering a candidate agent to a mammal or group of mammals (M), a control agent to another mammal or group of mammals and comparing the level expression of BPI or its related polypeptide or of mRNA encoding them in the two groups, or comparing the level of induction of a cellular second messenger in the two groups;

(11) an isolated nucleic acid molecule (VI) that hybridizes to a nucleotide sequence encoding (at least 10 consecutive amino acids of) BPI-41 or BPI-56 or its complement;

(12) a vector (VII) comprising (VI);

(13) a host cell comprising (VII);

(14) screening, diagnosis or prognosis (VIII) of BC in a subject or for monitoring the effect of an anti-BC drug or therapy administered to a subject, by:

(a) contacting an oligonucleotide probe comprising 10 or more consecutive nucleotides complementary to a nucleotide sequence encoding a BPI chosen from BPI-1, 5, 6, 9, 10-14, 19-21, 23-25, 27-29, 31-34, 37, 40, 40-56 with an RNA obtained from a biological sample from the subject or with cDNA copied from the RNA to permit hybridization of the probe to the nucleotide sequence if present;

(b) detecting hybridization, if any between the probe and the nucleotide sequence; and

(c) comparing the hybridization with hybridization detected in a control sample, or with a previously determined reference range; and

(15) an isolated nucleic acid molecule that hybridizes under high or moderate stringent conditions to a nucleic acid sequence selected from 204 sequences of defined bp given in the specification, such as GARTGYCAR; GAGTGCCAG; and TGYCARGCNACNGGNTTYWSNCCNMGN.

ACTIVITY - Cytostatic. No supporting data is given.

MECHANISM OF ACTION - Antisense therapy.

USE - The method is useful for screening, diagnosis or prognosis of breast cancer, determining the stage or severity of BC, monitoring the effect of therapy administered to a subject having BC, and for identifying a subject at risk of developing BC.

Dwg.0/1

Searcher : Shears 571-272-2528

L12 ANSWER 4 OF 4 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2000-602142 [57] WPIDS
DOC. NO. NON-CPI: N2000-445509
DOC. NO. CPI: C2000-180261
TITLE: Screening, diagnosis of breast cancer and monitoring the effectiveness of breast cancer therapy, involves detecting **breast cancer-associated features** and breast cancer-associated protein isoforms.
DERWENT CLASS: B04 D16 S03 S05
INVENTOR(S): AMESS, B; O'HARE, M J; PAREKH, R B; TOWNSEND, R R; WATERFIELD, M D
PATENT ASSIGNEE(S): (OXFO-N) OXFORD GLYCOSCIENCES UK LTD
COUNTRY COUNT: 92

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000055628	A1	20000921	(200057)*	EN	86
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2000031775	A	20001004	(200101)		
EP 1159618	A1	20011205	(200203)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000055628	A1	WO 2000-GB908	20000313
AU 2000031775	A	AU 2000-31775	20000313
EP 1159618	A1	EP 2000-909494	20000313
		WO 2000-GB908	20000313

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000031775	A	Based on	WO 2000055628
EP 1159618	A1	Based on	WO 2000055628

PRIORITY APPLN. INFO: GB 1999-5817 19990312
AN 2000-602142 [57] WPIDS
AB WO 200055628 A UPAB: 20001109
NOVELTY - Screening, diagnosis and prognosis of breast cancer, for monitoring the effectiveness of breast cancer treatment in a human, comprising identifying the presence of absence of **breast cancer-associated features** (**BF**) or **breast cancer-associated** protein isoforms (BPIs), in a biological sample obtained from the human, is

new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an antibody (I) which specifically binds to BF; and

(2) a diagnostic kit (II) comprising one or more reagents for use in the detection and/or determination of one or more of BF.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Gene therapy. No biological data is given.

USE - (I) is useful for treating breast cancer, in particular metastatic breast cancer by administering (I) conjugated to a cytotoxic or a cytostatic agent and also for screening and/or diagnosis of breast cancer in a human (claimed).

Dwg.0/0

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, CONFSCI, SCISEARCH, CANCERLIT' ENTERED AT 10:58:39 ON 25 FEB 2004)

L13 1084 SEA ABB=ON PLU=ON ("HERATH"? OR "CHANDRASIRI"?)/AU - Author

L14 3 SEA ABB=ON PLU=ON L13 AND (BF## OR (BC OR BREAST CANCER)(1W) FEATURE)

L15 2 DUP REM L14 (1 DUPLICATE REMOVED)

L15 ANSWER 1 OF 2 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-175048 [17] WPIDS

DOC. NO. NON-CPI: N2003-137905

DOC. NO. CPI: C2003-045678

TITLE: Screening, diagnosing or determining the stage or severity of breast cancer, comprises analyzing and quantitatively detecting **Breast Cancer**-Associated **Features** or Breast Cancer-Associated Protein Isoforms in a biological sample.

DERWENT CLASS: B04 D16 S03

INVENTOR(S): **HERATH, H M A C**

PATENT ASSIGNEE(S): (OXFO-N) OXFORD GLYCOSCIENCES UK LTD

COUNTRY COUNT: 101

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002088750	A2	20021107	(200317)*	EN	88
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW					
EP 1384079	A2	20040128	(200409)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

Searcher : Shears 571-272-2528

WO 2002088750 A2	WO 2002-GB2022	20020502
EP 1384079 A2	EP 2002-720302	20020502
	WO 2002-GB2022	20020502

FILING DETAILS:

PATENT NO	KIND		PATENT NO
EP 1384079	A2	Based on	WO 2002088750

PRIORITY APPLN. INFO: GB 2001-28062 20011122; GB 2001-10790 20010502; GB 2001-18385 20010727; GB 2001-19791 20010814; GB 2001-20045 20010816

AN 2003-175048 [17] WPIDS

AB WO 200288750 A UPAB: 20030312

NOVELTY - Screening, diagnosing or determining the stage or severity of breast cancer, identifying a subject at risk of developing breast cancer, or monitoring the effect of therapy administered to a subject with breast cancer, by generatating a two-dimensional array of features comprising **Breast Cancer**-Associated **Features** (**BFs**), or quantitatively detecting Breast Cancer-Associated Protein Isoforms (BPIs).

DETAILED DESCRIPTION - Screening, diagnosing or determining the stage or severity of breast cancer, identifying a subject at risk of developing breast cancer, or monitoring the effect of therapy administered to a subject with breast cancer, comprises:

(a) analyzing a test biological sample from the subject by two-dimensional electrophoresis to generate a two-dimensional array of features, where the array comprises one or more of the **BFs** consisting of **BF**-101, **BF**-102, **BF**-103, **BF**-104, **BF**-105, **BF**-106, **BF**-107, **BF**-108, **BF**-109, **BF**-110, **BF**-111, **BF**-112, **BF**-113, **BF**-114, **BF**-115, **BF**-116, **BF**-117, **BF**-118, **BF**-119, **BF**-120, **BF**-121, **BF**-122, **BF**-123, **BF**-124, **BF**-125, **BF**-126, **BF**-127, **BF**-128, **BF**-129, **BF**-130, **BF**-131, **BF**-132, **BF**-133, **BF**-134, **BF**-135, **BF**-136, **BF**-137, **BF**-138, **BF**-139, **BF**-140, **BF**-141, **BF**-142, **BF**-143, **BF**-144, **BF**-145, **BF**-146, **BF**-147, **BF**-148, **BF**-149, **BF**-150, **BF**-151, **BF**-152, **BF**-153, **BF**-155, **BF**-156, **BF**-157, **BF**-158, **BF**-159, **BF**-160, **BF**-161, **BF**-162, **BF**-163, **BF**-164, **BF**-165, **BF**-166, **BF**-509, **BF**-510, **BF**-511, **BF**-512, **BF**-513, **BF**-514, **BF**-515, **BF**-516, **BF**-517, **BF**-518, **BF**-519, or **BF**-520; and

(b) comparing the abundance of one or more **BFs** in the test sample with the abundance of one or more **BFs** in a biological sample from one or more subjects free from breast cancer, or with a previously determined reference range for that feature in

subjects free from breast cancer, or with the abundance of an Expression Reference Feature (ERF) in the test sample.

Alternatively, the method comprises quantitatively detecting, in a test biological sample from the subject, one or more of the BPIs consisting of BPI-186, BPI-101, BPI-187, BPI-102, BPI-103, BPI-104, BPI-188, BPI-111, BPI-113, BPI-114, BPI-115, BPI-117, BPI-118, BPI-191, BPI-119, BPI-120, BPI-121, BPI-123, BPI-124, BPI-125, BPI-126, BPI-127, BPI-189, BPI-192, BPI-128, BPI-129, BPI-130, BPI-131, BPI-133, BPI-135, BPI-138, BPI-139, BPI-143, BPI-144, BPI-145, BPI-146, BPI-147, BPI-148, BPI-149, BPI-150, BPI-152, BPI-153, BPI-154, BPI-155, BPI-156, BPI-158, BPI-159, BPI-160, BPI-161, BPI-162, BPI-163, BPI-164, BPI-165, BPI-167, BPI-170, BPI-172, BPI-173, BPI-174, BPI-175, BPI-176, BPI-177, BPI-178, BPI-179, BPI-180, BPI-181, BPI-182, BPI-190, BPI-184, BPI-514, BPI-516, BPI-517, BPI-521, BPI-523, BPI-545, BPI-527, BPI-529, BPI-531, BPI-546, BPI-532, BPI-533, BPI-534, BPI-535, or BPI-536. INDEPENDENT CLAIMS are also included for the following:

(1) an antibody capable of immunospecifically binding to one of the BPIs;

(2) a kit comprising one or more antibodies of (1) and/or one or more of the BPIs, other reagents and instructions for use;

(3) pharmaceutical compositions comprising:

(a) a BPI, or a nucleic acid encoding a BPI, and a carrier; or

(b) the antibody of (1), or a fragment or derivative of the antibody, and a carrier;

(4) screening for agents that interact with one or more BPIs, fragments of BPIs (BPI fragment), polypeptides related to BPIs (BPI-related polypeptide), or BPI-fusion proteins;

(5) screening for or identifying agents that modulate the expression or activity of one or more BPIs, a BPI fragment, a BPI-related polypeptide, or BPI-fusion proteins;

(6) modulating the activity of one or more of the BPIs;

(7) treating or preventing breast cancer; and

(8) identifying targets for therapeutic modulation of breast cancer, where the activity of one or more of the BPIs is utilized as a measure to determine whether a candidate target is effective for modulation of breast cancer.

ACTIVITY - Cytostatic. No biological data is given.

MECHANISM OF ACTION - Antisense gene therapy.

USE - Methods and kits comprising antibodies or the BPIs are useful for screening, diagnosing or determining the stage or severity of breast cancer, identifying a subject at risk of developing breast cancer, or monitoring the effect of therapy administered to a subject with breast cancer (all claimed). The antibodies, BPIs, nucleic acid encoding the BPIs, or an agent that modulates the activity of one or more BPIs are useful for treating or preventing breast cancer.

Dwg.0/3

L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2001:137483 HCAPLUS

DOCUMENT NUMBER: 134:203384

TITLE: BPI proteins, genes and their use for diagnosis and treatment of breast cancer

INVENTOR(S): **Herath, Herath Mudiyanselage Athula Chandrasiri**

PATENT ASSIGNEE(S): Oxford Glycosciences (UK) Limited, UK
SOURCE: PCT Int. Appl., 146 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001013117	A2	20010222	WO 2000-GB3143	20000814
WO 2001013117	A3	20020117		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1208381	A2	20020529	EP 2000-953323	20000814
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003507027	T2	20030225	JP 2001-517168	20000814
US 2003152935	A1	20030814	US 2002-76047	20020213

PRIORITY APPLN. INFO.:

GB 1999-19258	A	19990813
GB 2000-7754	A	20000330
WO 2000-GB3143	W	20000814

AB The present invention provides methods and compns. for screening, diagnosis and prognosis of breast cancer, for monitoring the effectiveness of breast cancer treatment, and for drug development. **Breast Cancer**-Associated **Features** (**BFs**), detectable by two-dimensional electrophoresis of serum are described. The invention further provides Breast Cancer-Associated Protein Isoforms (BPIs) detectable in cerebrospinal fluid, serum or plasma, prepns. comprising isolated BPIs, antibodies immunospecific for BPIs, and kits comprising the aforesaid.

FILE 'HOME' ENTERED AT 10:59:56 ON 25 FEB 2004